

# Taking evidence-based practices to school: using expert opinion to develop a brief, evidence-informed school-based mental health intervention

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School-based mental health services offer unparalleled opportunities for providing accessible care to children and adolescents. Research indicates that services available in schools are rarely based on evidence of effectiveness and are typically disconnected from the larger school context. To address these issues, the current paper presents initial studies to inform the development of a brief, evidence-based, flexible mental health intervention that fits the school context while maintaining clear structure. Results from two qualitative research studies – key informant interviews with school mental health experts and a nominal group decision-making process with stakeholders - are presented, both of which were aimed at informing intervention development and testing assumptions about how best to design an effective, context-specific mental health intervention that can be flexibly applied in educational settings. An explicit focus on educational outcomes within the context of mental health service delivery was identified as a key component of this integration. The paper concludes with a discussion of how this research has influenced the ongoing development of the intervention protocol, exemplifying a collaborative and iterative approach to developing schoolbased programmes.

**Keywords:** evidence-based practice; educational outcomes; appropriateness; compatibility; mental health integration; school mental health; common elements

#### Barriers to the use of research evidence in school-based mental health

Nationally, there has been growing emphasis on increasing the availability of high-quality evidence-based practices (EBPs) in community-based service settings (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; McHugh & Barlow, 2010; Rotheram-Borus, Swendeman, & Chorpita, 2012). Reviews of school-based mental health (SBMH) services, however, suggest that the care delivered is not likely to be based on empirical research evidence (Evans & Weist, 2004; Rones & Hoagwood, 2000), significantly reducing the likelihood that services will be effective and, consequently, compromising their potential public health impact when delivered to youth on a large scale. Several factors unique to the education sector contribute to the quality and effectiveness gap (see Forman, Olin, Hoagwood, Crowe, & Saka, 2009; Forman et al., 2013 for a comprehensive discussion of barriers).

First, the policies and organizational structures represented in school programming may influence how and to whom mental health services are provided. For example, school-based initiatives such as Response to Intervention (RtI) or Multi-Tiered System of

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Supports (MTSS) – academic intervention models where approximately 80% of students are being supported by services in 'Tier 1' (universal), 15% in 'Tier 2' (selected), and 5% in 'Tier 3' (indicated) -provide early, systematic, and research-based instructional assistance, supported by frequent progress monitoring, to children experiencing learning difficulties (Barrett, Eber, & Weist, 2012; Bradley, Danielson, & Doolittle, 2007; Cheney, Flower, & Templeton, 2008; Gamm et al., 2012). Although these policies would seem like natural partners with mental health, most strategies for providing mental health care in schools are not integrated with RtI/MTSS initiatives or other school structures. Furthermore, as described in greater detail elsewhere in this special series (Pullmann, Bruns, Daly, & Sander, 2013), most SBMH programmes do not explicitly promote or monitor academic outcomes (Atkins, Hoagwood, Kutash, & Seidman, 2010; Franklin, Kim, & Tripodi, 2009; Lyon, Borntrager, Nakamura, & Higa-McMillan, 2013). Second, many unique characteristics distinguish SBMH service providers and recipients. For instance, providers experience significant time constraints (Lyon et al., 2013) given the need to deal with frequent student crises and the sheer number of students in need of services. Relative to other settings, students who seek treatment in school may also demonstrate a broad spectrum of acuity ranging from early signs of distress to full psychiatric diagnoses (Lyon, Charlesworth-Attie, Vander Stoep, & McCauley, 2011; Walker, Kerns, Lyon, Bruns, & Cosgrove, 2010). Finally, very few of the interventions used in SBMH have been designed for or tested in education sector service delivery settings (Paternite, 2005; Wong, 2008). Instead, most of the EBPs implemented have been transported from other contexts. In the light of the unique system, provider, and recipient characteristics described above, efforts to maximize the contextual appropriateness or 'fit' of interventions to the school setting are particularly relevant to EBPs implementation in SBMH (Lyon et al., in press-b).

#### Enhancing intervention-setting fit with a common elements approach

In the last decade, new models of service provision have emerged which facilitate the use of research knowledge in practice by capitalizing on the similarities among evidence-based treatment protocols for youth mental health problems. This type of *common elements* approach (Chorpita, Daleiden, & Weisz, 2005a) generally allows for more active, flexible, and individualized delivery than traditional manualized approaches. To this end, recent common elements approaches make explicit use of *modularized design* (e.g., Weisz et al., 2012) in which individual components can be implemented independently or in complement with one another to bring about specific treatment outcomes (Chorpita, Daleiden, & Weisz, 2005b). Similar to RtI and MTSS, this type of approach relies heavily on routine outcome monitoring – using standardized tools (e.g., symptom rating scales) and individualized, quantifiable targets (e.g., school attendance) – to determine whether a particular intervention course should be altered or maintained (Lyon, Nakamura, & Higa-McMillan, 2013).

A modularized, common elements approach to psychotherapy has been found to be more acceptable to providers than psychotherapy based on standard treatment manuals (Borntrager, Chorpita, Higa-McMillan, & Weisz, 2009) and more effective than either standard manualized or usual care (Weisz et al., 2012). Furthermore, due to its flexibility, the common elements approach may be particularly appropriate for use with ethnic and cultural minority youth, such as those likely to be seen in schools (Lyon, Lau, McCauley, Vander Stoep, & Chorpita, in press-a). For these reasons, multiple efforts have been undertaken to evaluate the utility of the common elements approach for use by SBMH

providers, with some encouraging results (Lyon, et al., 2011, in press-b; Stephan, Wissow, & Pichler, 2010; Stephan et al., 2012; Weist et al., 2009).

## The Brief Intervention for School Clinicians

Our research team initiated a project to develop a mental health intervention for high school students, called the *Brief Intervention for School Clinicians (BRISC)*, which could fit optimally with the school context while simultaneously maintaining a clear structure and use of evidence-based intervention and assessment techniques. BRISC is designed to be responsive to constraints on school-based clinicians' time, align with primary presenting problems of students, integrate an active focus on academic progress, and be useable by the varied professionals who provide mental health care in schools. BRISC was initially characterized by *five primary elements*, each intended to address specific barriers to effective treatment. These elements and their rationale are displayed in Figure 1, and discussed below:

- (1) Use of a systematic problem-solving orientation to help providers identify key intervention targets, test solutions, and support positive student development;
- (2) A common elements approach to delivering empirically supported mental health intervention components which uses specific treatment modules that match students' presenting problems (e.g., mood-changing skills);
- (3) A stepped care/tiered RtI structure that integrates BRISC into the RtI (or MTSS) framework and describes how to step up or down to more or less intensive options (from its initial development, BRISC has been conceptualized as a 'Tier 2' intervention);
- (4) Culturally informed treatment engagement and motivation strategies built into the intervention; and
- (5) Systematic assessment and monitoring, including brief, data-driven check-ins regarding symptoms, academic success, practice of skills, and student satisfaction.

Building on this framework, the current paper describes two initial development studies designed to inform BRISC's iterative development process.

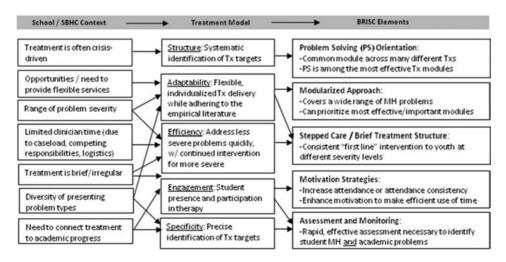


Figure 1. BRISC logic model.

## **Initial BRISC development studies**

As an initial step in the BRISC development process, two studies were designed to gather expert input to inform iterative intervention development in a manner that would demonstrate a high degree of intervention—setting fit (i.e., most likely to be practical, useful, and aligned with the identified needs of the education setting, students, and service providers). In both studies, the preliminary components of the BRISC model (above) were presented to participants to elicit their feedback and discussion. In Study 1, individual interviews were conducted with local and national key informants, all of whom are involved in SBMH. Informed by the results of the first study, Study 2 involved a two-day meeting (i.e., the BRISC 'Development Summit') in which participants took part in a structured information–generation and prioritization process (the *Nominal Group Technique*, described below). Although both studies were conducted within a single urban school district, they were designed to generate information that would both be relevant to the immediate, local initiative and generalizable to other settings in a future, larger-scale BRISC trial.

Drawing from a comprehensive review of educational and mental health services research, we identified four key domains within which to organize participant input from both studies. First, we focused on the *integration of mental health service delivery into schools*, including the multi-level characteristics of the context (policy, organization, providers, and recipients). Second, we sought input on how to develop a treatment *based on evidence for effectiveness* as well as *feasibility for implementation* by SBMH clinicians. Third, in consideration of the populations most commonly served in schools, we collected information about ensuring that the intervention could *engage a diverse group of students* in a way that reflects principles of cultural and linguistic competence. Finally, we investigated how best to collect and incorporate *relevant outcomes and data* into the intervention, including information about mental health symptoms and an explicit focus on the use of indicators of academic functioning and progress.

## Study 1 (key informant interviews)

#### Method

#### **Participants**

A total of 21 people were invited to participate in key informant interviews on the basis of their experience working in SBMH nationally and locally. Of the 21 invited participants, 13 completed semi-structured interviews (62%). The key reason for non-participation was limited availability during the short window between Study 1 and Study 2. Six of the respondents were national experts in SBMH who were also members of an advisory panel and development workgroup for the project. Other respondents included the school district's health services programme manager; one member of a mental health provider organization; two staff members from a public health organization in King County, Washington; two counsellors from school-based health centres (SBHCs); and one SBHC mental health supervisor.

#### **Procedures**

Prior to being interviewed, participants received materials summarizing the rationale for the project, a description of how the proposed intervention was designed to address social and emotional problems that interfere with academic success, the theory of change, a description of the initial components of the intervention, and an overview of the interview questions. Phone interviews were conducted by three faculty members from the research group between June and August 2012. Interviews took approximately one hour to complete, during which the interviewer took detailed notes about participant responses. An exemption from full review was obtained from the University of Washington Human Subjects Division.

Questions in the semi-structured interview (and the topic areas to which they were most relevant) included: (1) Does the intervention align with current theory, evidence, and real-world conditions (integration, content/structure)? (2) Which literature or policy statements are not referenced in the materials that might be relevant to this project (content/structure)? (3) To what extent will the proposed intervention structure, practices, and sequence be relevant and helpful for students referred to or seeking help for social-emotional problems in schools (integration, engagement)? (4) What changes, refinements, or additions to the logic model, the theory of change, or the proposed intervention components are needed (content/structure)? (5) How do you think this intervention could be made more compatible with the goals and structure of the school setting (integration)? (6) How could this intervention be modified to more effectively support academic performance goals (outcomes/data)? (7) What approach would you take to support high school students whose emotional health problems were impeding their academic success (all topic areas)?

## Analytic strategy

Interviewer notes of key informant responses were coded by a master's level research coordinator and an advanced graduate student in Public Health using Atlas.ti qualitative software (Muhr, 2004). A directed content analysis approach was used to code the data. In directed analysis (Hsieh & Shannon, 2005), a priori themes are derived from characteristics of the phenomena being examined, agreed upon definitions and theories from the literature, as well as the knowledge and experiences of researchers (Ryan & Bernard, 2003). As described in the introduction, the four overarching topic areas identified through this approach were (1) integration of mental health service delivery into schools, (2) content and structure based on feasibility and evidence for effectiveness, (3) student engagement and cultural/linguistic responsiveness, and (4) use of relevant outcomes and data (including school data) for monitoring and feedback.

Coders first coded several interview transcripts independently, but then met to compare and consolidate their codes. All codes were categorized into one of the four themes. This process resulted in the creation of a codebook that was used to code the remaining interview transcripts. As coding proceeded, additional codes were added to the codebook, previous transcripts were re-coded against new codes as necessary, and coders checked in with one another frequently to ensure there was consensus regarding code assignment. Whenever there was disagreement, coders sought input from one or more of the research team members who conducted the initial interviews to serve as a tiebreaker.

#### Results

## Integration of mental health into schools

## RtI integration

Of the nine (69%) respondents who made statements about the integration of the RtI framework, the majority felt that the intervention would be influenced by the structure of

existing Tier 1 supports (i.e., supportive climate, engaged adults and students) (see Table 1). Others felt the project's fit within the three-tiered model needed additional clarification: 'In School Psychology, Tier 2 interventions are most often carried out with groups. Tier 3 kids may get ongoing counselling. This brief intervention delivered to a targeted group of individuals, but not particularly individualized, is somewhere in between'.

## Identifying students

Nine (69%) respondents referred to strategies for identifying students to participate in the intervention. The majority of respondents emphasized a need for consistent school-wide screening and referral, via validated, standardized measures. As one respondent puts it:

Most referrals now are self-referrals ... It would be better to start with an explicit target group, i. e., students with academic problems. When school people are asked to refer kids to mental health care, they identify kids with high-end behavioural problems and miss those with internalizing problems. It would be good to look for opportunities to systematically identify kids.

Table 1. Number and percentage of Study 1 participants mentioning themes.

	N	%
Integration of mental health into schools		
Response to intervention (RtI) integration	9	69
Identifying students	9	69
Engaging school staff	6	46
Focus on academics	6	46
Other considerations and questions	5	38
Content and structure of intervention		
Clinician training	11	85
Homework	8	62
Treatment content	8	62
Stepped care	8	62
Positive features and strengths	7	54
Challenges	7	54
Questions from interviewees	5	38
Individualization is crucial	4	31
Perceived outcomes of BRISC	3	23
What could be added?	3	23
Student engagement and cultural linguistic responsiveness		
Type of student that can benefit from intervention	8	62
Challenges	7	54
Considerations of family involvement	6	46
Other considerations	2	15
Monitoring and feedback: use of school data		
Data for monitoring and feedback	8	62
Format of feedback	7	54
Who should receive feedback?	6	46
Who should provide feedback?	5	38
Frequency of feedback/monitoring	5	38
Challenges	5	38
Praised by respondents	4	31
Best practices/ways to address challenges	2	15
Other considerations and questions	7	54

Note: Total number of participants n = 13.

## Engaging school staff

Six (46%) respondents made statements about engaging school staff as a method of supporting the intervention and its successful implementation. Some made specific recommendations about educating school staff, with one suggesting 'in-service trainings for teachers and staff regarding particular skills such as problem-solving, psychoeducation, communication analysis, etc.' as well as 'educat[ing] them about general adolescent development [and] social-emotional health'.

## Focus on academics

Six (46%) respondents made statements about the need to focus on academic outcomes in the context of a school-based intervention. Some respondents expressed scepticism that mental health treatments, even those available in schools, would be able to meaningfully influence academic outcomes ('It is not compelling to say that simply reducing anxiety will lead to learning because the kid is probably still not learning. The problem we have in mental health is that it is not its goal to improve learning'). Other respondents pointed out that academic and other school outcomes are not universally relevant, noting that only a subset of the students receiving SBMH services experience academic problems.

## Content and structure of intervention

## Clinician training

Of the sample, 11 (85%) respondents gave input about training clinicians to deliver the intervention. The majority of these respondents believed a wide range of school-based professionals could be interventionists, including counsellors, school psychologists, and/ or school nurses. As one respondent explained, 'All nurses in [local school district] have a Bachelor's degree or are nurse practitioners which means they have had mental health training [and] could be mental health interventionists'. Instead of focusing on particular types of providers, other respondents asked questions about the specific skills to be taught and the training process itself (e.g., 'Clinicians really need to learn how to pick the components and elements they will use'). Finally, some respondents believed that obtaining clinician buy-in might be difficult because it deviates significantly from the usual clinical practice (e.g., 'Not all clinicians will buy-in ... How will clinicians be prepared for such a radical change in practice?').

#### Homework

Eight (62%) respondents made statements about the homework assigned to students as a part of the intervention, with the majority of respondents believing that the success of the homework component may vary by student (e.g., 'Whether students can complete homework will be a function of the student's self-regulatory capacity'). Other respondents indicated that framing between-session practice as 'homework' may carry negative connotations for some youth and suggested that alternative wording, such as 'practice exercises', be used.

#### Treatment content

Of the eight (62%) respondents making statements about treatment content, the majority voiced support for the specific BRISC treatment modules we had initially selected. Similar

to comments about homework, respondents stated that the helpfulness of psychoeducation could vary by student. Some suggested that psychoeducation 'gives the kid hope ... that she/he has a problem that can be solved'. Others stated that psychoeducation can be effective as long as it is in relation to a student's context, but suggested that psychoeducation can sometimes lead to increased reporting of symptoms ('Psychoeducation is most effective if it builds on the student's story and is predicated on what is known about the child's background').

Several respondents supported selection of a limited number of modules that were tailored to typical student presenting problems. Finally, several respondents believed that it would be difficult for students to learn new skills within such a brief time frame. As one respondent puts it, '...it is hard to shift ownership of skill from counsellor to student in four sessions. Often multiple opportunities to practice are needed to really learn a skill'.

## Stepped care

Eight (62%) respondents made statements referencing stepped care, one core feature of the design of the intervention. The majority of respondents wanted to know how the need for more intensive services would be determined after the four sessions were completed. Other respondents believed that the protocol provided an opportunity for improving service delivery (e.g., 'I think it is a good way to organize resources and be more efficient with them').

## Student engagement and cultural/linguistic responsiveness

Regarding engagement of students, the majority of respondents made statements related to the type of student that would be most likely to benefit from the intervention, challenges surrounding student engagement, and considerations for family involvement.

## Students most likely to benefit

Eight (62%) respondents discussed type(s) of students who could benefit from the intervention. Some comments suggested that students who already demonstrate high levels of resilience could be among the most appropriate candidates (e.g., 'students who have an adequate combination of resilience, internal resources, and some family support, but are floundering emotionally, socially, and academically and need help tapping into their personal and family resources', 'those who have overall been doing pretty well [B or C student], but then something happens. There is a life stressor etc. . . . They are generally keeping things together, but need more support before it gets too severe'). In contrast, students with poor attendance and transient or situational problems were thought by some to be less appropriate (e.g., 'kids with very poor attendance would not be good candidates unless the engagement strategies were very effective').

## Student engagement challenges

Seven (54%) respondents made statements about the potential challenges to student engagement, on the basis of developmental considerations or cultural and linguistic compatibility. This included asking how key therapeutic processes, such as emotional expression, may vary cross-culturally ('how well do students align with the emotion that is selected as the target for intervention in the first session?'). A number of respondents underscored the importance of building initial rapport between clinicians and students and

attending carefully to adolescent development. Other respondents believed that it would be challenging to engage adolescents with mental health issues and maintain their motivation over time ('turning the corner from brief and irregular to BRISC engagement will be a tough sell because it is challenging to engage adolescents in treatment and schedule sessions at times when they do not feel they are in an immediate crisis situation').

## Family involvement

Six (46%) respondents indicated it was important to build family involvement into the intervention. Specifically, respondents encouraged creation of a school climate where parental involvement is encouraged (e.g., 'Create support, accountability, and incentives for clinicians to involve them. Create an individualized option for families – come in, or be on the speakerphone – we will send a report of our progress. This needs to happen with every student'). Related, respondents also highlighted the importance of being cognizant and considerate of family culture and values across a range of diversity issues (e.g., 'Paying close attention to the culture of the student [race, recent immigration, and socioeconomic status] throughout the intervention').

## Monitoring, feedback, and use of school data

## Data for monitoring and feedback

Nine (62%) respondents shared opinions about the type of data they felt would be most important to monitor. Indicators such as attendance, grades, and motivation for change were cited frequently (e.g., 'It is important to keep focus on academic progress and to choose discrete indicators such as attendance and tardiness').

#### Format of feedback

Seven (54%) respondents provided suggestions related to the format of feedback. The majority of respondents suggested the use of an online data system, as a means of efficiently being able to review progress across students receiving therapy and/or with individual students.

## Who should receive feedback?

Six (46%) interviewees gave their opinions about who should receive feedback. Many felt that feedback should be shared with an integrated team of school personnel who are working to support a given youth. Other respondents believed principals should receive feedback. In recognition of confidentiality concerns, some respondents indicated that students should make the determination about who is informed about their problems and progress.

#### Data-monitoring challenges

Five (38%) respondents referenced challenges that may be encountered with monitoring and feedback. Commonly cited challenges included data firewalls and privacy laws that govern healthcare and education, sometimes in conflicting ways. For example:

Privacy laws prevent interaction among mental health and school staff. HIPAA makes it challenging for school-based health centres to share information with teachers. FERPA

prevents teachers from collaborating with school-based health centres. How these laws are interpreted seems to vary from teacher to teacher.

Other respondents anticipated difficulty transitioning from focusing simply on health and mental health outcomes to an approach that monitors school outcomes as well (e.g., 'Our organization was initially reluctant to steer away from tracking more clear health-related indicators, such as pregnancies and symptoms, and accept grades and other academic goals as health outcomes'). Nonetheless, several respondents expressed optimism about the possibilities offered by more explicitly focusing on school data. As noted by one respondent:

Public health and mental health practitioners have changed their tune and acknowledge the value of both because of the evidence base and because they recognize school success as an important measure of functioning for youth, as occupational success is for adults. Although they initially resisted the inclusion of academic goals in contracts, they have come to see that helping students succeed in school is an important functional outcome.

## Study 2 (nominal group technique)

## Method

## **Participants**

After the key informant interviews had been conducted, 30 local and national experts attended a two-day BRISC Development Summit, facilitated by project personnel, during which all Study 2 data were collected. Participants included researchers in various domains of mental health services and school mental health, Seattle Public School District employees, SBMH service providers and supervisors, and representatives from the local department of public health. Of the participants in Study 1, 11 (85%) also participated in the Development Summit.

#### Procedure

During the Summit, attendees participated in two rounds of small group work in which they engaged in a structured, consensus-based form of qualitative data collection referred to as the Nominal Group Technique (NGT). The purpose of NGT is to introduce an issue to the study group, generate information in response to the issue, and prioritize that information through a structured process of group discussion and voting (Potter, Gordon, & Hamer, 2004).

Each NGT group included 8–10 participants and was focused on one of the four previously identified topic areas. There were eight total small group NGT processes, two on each of the four topics. Each attendee was assigned to two groups that aligned with their interest or expertise. In each group, participants were asked three questions related to the group's identified theme: (1) what resonates or what is a strength of the BRISC intervention as presented?; (2) what is a concern, weakness, or something that has not been well addressed?; and (3) what action steps would you suggest for the project moving forward? Questions were the same across areas, but participants were asked to consider the questions as they related to their topic area. To answer each question, the groups employed the following five steps, consistent with the NGT model:

- (1) *Opening statement:* An orientation to the purpose, rules, and procedures of the group process.
- (2) Silent generation of ideas: Participants recorded all ideas that occurred to them.

- (3) *Round robin:* Participants stated one idea at a time, with each recorded on a group flip chart, until all ideas were presented or a time limit was reached.
- (4) Clarification of ideas: Participants were invited to seek verbal clarification or further details about the ideas listed, while the facilitator kept the process as neutral as possible and consolidated duplicated ideas.
- (5) *Voting and ranking:* After clarification and consolidation, participants voted on priorities by placing stickers on the flip chart. Each participant was allotted three votes.

For the current project, the fifth step of voting and ranking was carried out only for the third question (what action steps were suggested for BRISC development). Each group's top five ideas were then presented to the entire group of attendees for a second prioritization vote.

#### Results

Results of the final voting on priority recommendations in each of the four topic areas are presented in Table 2 and discussed below.

## Integration of mental health into schools

Of the participants, 60% endorsed that BRISC should focus on developing a targeted intervention that can be integrated within a school's existing tiered (RtI) system. They advised against building an independent, and likely redundant, multi-tier approach through which to respond to student mental health needs. In line with that perspective, 53% of participants also endorsed the need to identify the appropriate oversight team within the school setting or establish a building-level oversight team in each school that would supervise the intervention's integration with RtI and other existing school structures.

Other frequently endorsed ideas included adopting education sector language about positive behaviour supports when describing BRISC to facilitate buy-in and understanding by all stakeholders (53% of voters endorsed this). Participants supported a proposal to identify school-level implementation readiness criteria (which may include the accessibility of academic data to mental health providers) and develop a way to measure a school's ability to integrate the BRISC programme (30% endorsed). The final recommendation for promoting integration involved the importance of working to ensure students have an active voice in the intervention development process and in selecting indicators of 'progress' for outcome monitoring (30% endorsed).

## Content and structure of intervention

Of the participants, 57% endorsed the recommendation that academic interventions and outcomes should be incorporated into the programme's modules along with mental health interventions and typical mental health outcomes, suggesting a need for increased emphasis on academic success. This sentiment was linked to a concern that, even when a mental health intervention is delivered, academic difficulties may persist and, if unaddressed, can overshadow symptom improvements. Of the sample, 50% also felt that it was important to develop a detailed plan of how each aspect of the intervention would integrate into the clinician's workflow as well as relevant organizational structures and demands. Furthermore, ensuring that flexibility and individualization are promoted in a

Table 2. Number and percentage of participants endorsing recommendations.

	N	%
Integration of mental health into schools		
Keep focused on developing a targeted intervention to exist in a tiered system	18	60
Build an accountable oversight team	16	53
Identify the appropriate 'language' for the intervention	16	53
Identify 'readiness' criteria and measures	9	30
Ensure active student voice in determining 'progress'	9	30
Content and structure of intervention		
Incorporate academic interventions and monitoring academic success with students	17	57
Plan for integration into clinician workflow and organizational structure	15	50
Operationalize cultural responsivity within an evidence-based structure	14	47
Articulate and plan for BRISC to include implementation preconditions	11	37
Ensure that individualization is promoted in a structured and systematic way	10	33
Student engagement and cultural/linguistic responsiveness		
Define a basic model where fidelity is central as well as areas that can be applied more flexibly	15	50
Ongoing training and support for clinicians regarding culturally responsive treatment	14	47
Think about motivational interviewing as fundamental engagement strategy rather than a tool to be integrated as needed	13	43
Establish cultural consultation between clinician and cultural brokers for specific cultural issues	9	30
Include cultural self-awareness in training process	6	20
Monitoring and feedback: use of school data		
Create a BRISC steering committee that includes providers, school representatives, families, and students	22	73
Use brief measures that can facilitate student identification of important outcomes	14	47
Align goals and measurement strategies with ongoing school routines	12	40
Make use of existing data systems and complete a data inventory	12	40
Demonstrate the benefits of monitoring and feedback of data to school and provider opinion leaders	9	30

Note: Participants in the nominal group process (n = 30) were each allotted three votes with which to endorse recommendations.

structured and systematic way that maintains fidelity to EBP was endorsed by 33% of respondents.

## Student engagement and cultural/linguistic responsiveness

When providing recommendations addressing student engagement, including methods of ensuring that the programme would be responsive to a range of cultural groups, participants prioritized ideas that were centred largely on developing clinician skills and supporting new clinician behaviour. Similar to comments in the 'Content and Structure'

section, 50% of participants prioritized defining a basic intervention model in which fidelity to core components was central but which still allowed flexibility in other areas to meet individual student needs. Of the respondents, 47% prioritized having training and support for clinicians regarding cultural responsiveness. It was specifically noted that these efforts should be ongoing and not limited to the pre-intervention training period. Other priority recommendations included using Motivational Interviewing (Miller & Rollnick, 2002) as a fundamental engagement strategy for use with all youth, rather than a tool to be used only when engagement issues are identified by the clinician (43% endorsed), and establishing cultural consultation between the clinician and community-based cultural brokers for specific cultural issues relevant to students and families (30% endorsed).

## Monitoring and feedback: use of school data

Related to the use of data for the purposes of monitoring and feedback, 73% of participants endorsed the creation of a diverse BRISC steering committee or project team – comprising providers, educators, parents, and students – which would consider the use of school data for monitoring and feedback at multiple levels. Of the participants, 47% voted for using brief measures in the treatment process when possible, which can facilitate student identification of academic and socio-emotional outcomes on which to focus. The Top Problems Assessment (Weisz et al., 2011) was specifically mentioned as a promising tool for identifying and evaluating individualized monitoring targets. Participants also prioritized aligning goals and measurement strategies with ongoing school routines (40% endorsed) and making use of existing school district data systems by completing a comprehensive and district-specific data inventory (40% endorsed). Both of these recommendations acknowledged the potential for school and mental health data systems to supplement one another and were therefore identified as important avenues for integration.

## Discussion

There is a growing recognition of the importance of emotional health in facilitating academic success (Vander Stoep, Weiss, Kuo, Cheney, & Cohen, 2003). Meanwhile, public resources for youth mental health treatment are shrinking (Green et al., 2013). As a result, the role of schools in identifying and addressing mental and behavioural issues among youth is likely to continue to expand. To maximize the reach and positive effects of SBMH programmes, it is imperative to develop and use approaches that can demonstrate effectiveness in promoting emotional well-being and academic success as well as a high degree of compatibility with the school context. The current project represents a realworld example of an effort to develop and ultimately test an evidence-informed mental health intervention that is explicitly designed to fit the structure, resources, and mission of schools, address the typical presenting emotional health problems of secondary school students, and integrate into the workflow of SBMH clinicians. To this end, three crosscutting themes emerged from the two studies presented in this paper: (1) alignment with the school context, (2) flexible/responsive service delivery, and (3) effective data utilization. Furthermore, another theme related to the special issue was the consistently endorsed notion of increasing integration through the use of school data. These key findings are discussed in the context of ongoing BRISC protocol development and their relevance to SBMH more generally.

## Key findings

Alignment with the school context

The importance of aligning BRISC with the needs, structures, individuals (providers, youth, and families), and resources in schools was a consistent finding across both studies. Indeed, education-based frameworks such as RtI, MTSS, and School-wide Positive Behavior Support (SWPBS; Sugai & Horner, 2006) - as well as mental health frameworks, such as Systems of Care (Pires, 2002; Stroul & Friedman, 1994) - emphasize collaboration among families, schools, mental health, and other youth-serving systems, with the goal of a well-coordinated, multi-tiered continuum of effective programmes and services that meet the needs of all students (Barrett et al., 2012). Input from participants in both of our studies reinforced that, given the complex world of school programming and policies, simply identifying integration or collaboration as a goal does not provide a clear path to its achievement. Participants in both studies recommended that we clearly specify where BRISC is situated within the three-tiered model of stepped service provision and develop guidelines for how and when to refer students to more or less intensive supports based on their response to this intervention. As a result, we have developed a graphic to describe how BRISC fits within this framework and define key inputs from, and outputs into, the school context at multiple levels (see Figure 2).

Participants also referenced the need for a systematic, holistic strategy for integrating BRISC into individual schools. Given that school contexts vary greatly, even within individual school systems, several participants recommended that we develop an explicit implementation framework paired with a readiness assessment. Before implementing BRISC, a clinician or mental health implementation team can use this information to better understand the level of development of mental health and other supports in the school, facilitate connections between the clinician and other types of school-based social and behavioural supports, and develop an action plan around each implementation support

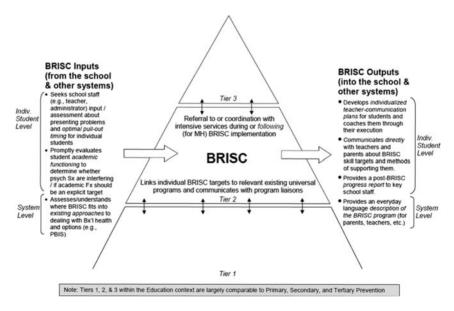


Figure 2. Framework for BRISC integration into the three-tiered model of school-based service delivery.

element. Low levels of readiness could be addressed with additional supports prior to, or in the process of, BRISC introduction. Specific indicators of readiness identified by advisors included: (1) presence of a team responsible for school-wide emotional and behavioural support planning (including BRISC), (2) systematic behavioural screening and assessment occurring in the school, (3) efforts at family engagement and outreach including events and parent-support groups, and (4) education and training for teachers and staff on mental health. Completing a comprehensive inventory of other Tier 1–2 and intensive Tier 3 services and supports is also critical, as is an evaluation of the availability and accessibility of educational data to monitor student functioning in the school context.

Another key component of school alignment, given the personnel working in schools, is the question of 'who will implement BRISC?' Study participants consistently noted that professionals in a range of roles could be trained and supported to effectively implement the intervention. Research shows that the diverse SBMH workforce (including guidance counsellors, school psychologists, school nurses, school social workers, and external agency-based clinicians) is responsible for a wide range of client care, but that the presence of such professionals does not necessarily mean increased mental health service use (Green et al., 2013; Kelly & Lueck, 2011). The brief, manualized, tiered format of BRISC could provide a means of engaging multiple types of professionals to provide mental health care (Atkins et al., 2010), thus increasing the likelihood that effective mental health interventions are available and used in schools.

Effectively aligning BRISC with the school context includes careful attention to the students who are most likely to receive SBMH services. Previous research has identified that youth from ethnic and cultural minority backgrounds are particularly likely to access SBMH care over services in other sectors (e.g., Kataoka, Stein, Nadeem, & Wong, 2007; Lyon, Ludwig, Vander Stoep, Gudmundsen, & McCauley, 2013). Participant responses across studies indicated that there may be opportunities to design the BRISC intervention and training protocols to encourage cultural responsiveness directly. Evidence from the field of youth mental health suggests that interventions that have been explicitly culturally adapted, on average, may be no more effective than non-adapted programmes (Huey, 2012); suggesting that individual clinician cultural competency may be an equally important area of emphasis. For these reasons, it will be important for the BRISC readiness assessment mentioned earlier to include specific questions about the state of cultural competence/competence training for school-based professionals, and for the BRISC programme to provide additional training as needed.

## Flexible/responsive service delivery

The theme of flexible service delivery in schools emerged when participants were discussing the overarching structure of BRISC and the stepped-care model for which it is intended, as well as methods of tailoring service delivery to be responsive to the diverse youth seen in schools. Consistent with emerging models of flexible, evidence-based psychotherapy interventions – which have been identified as particularly applicable to ethnic and cultural minority youth (Lyon et al., in press-a) – the ability of a BRISC provider to select from a set of specific practices or skills to individualize service delivery represents an additional level of BRISC cultural responsiveness and engagement. This level is largely dependent on an individual provider's ability to administer the BRISC protocol in a way that is appropriately tailored to students from a variety of backgrounds. Other input focused on the need to combine rigor with flexibility and simplicity, to achieve the goal of maximum applicability to student needs. These responses largely parallel the continuing 'fidelity versus flexibility

debate' that has permeated the literature on psychosocial mental health interventions (Cohen et al., 2008; Kendall & Beidas, 2007). Several advisors also recommended keeping the overall number of modules small, to narrow the focus of the intervention and facilitate practitioner learning and model adherence. Achieving a balance between simplicity and maximum applicability within a flexible, stepped-care model will be an important tension for the BRISC development team to resolve.

## Effective data utilization

Education data (e.g., attendance, homework completion, grades) have been identified as key drivers of effective, multi-level data-driven decision-making in SBMH (Lyon, Nakamura, & Higa-McMillan, 2013). This type of information can function as a practical cornerstone for the integration of mental health services into schools, enhancing collaboration among the diverse professionals working in schools around the shared objective of improving educational functioning. Indeed, the importance of outcome data in general — and educational data in particular — was a key theme across the two studies described above and across all four topic areas. Some respondents indicated that educational data could be used to determine which students would be appropriate for the BRISC intervention (e.g., excluding those who are already exhibiting very low attendance or academic failure and tracking them into alternative, more intensive services). Furthermore, it was suggested that the accessibility of educational data for mental health service delivery purposes represents an important readiness criterion for BRISC implementation.

Despite widespread interest in educational outcomes, participants were somewhat divided about the degree to which academic functioning should be a *central focus* of SBMH treatment. Some participants indicated that the primacy of the school mission and co-location of the practitioner within the school makes direct intervention focused on academics appropriate. For others, however, this appeared to represent a conflation of roles; these participants suggested that a more traditional facilitation of academic progress through removal of social-emotional barriers to learning should define the SBMH mission, as well as the BRISC practice model. BRISC has been conceptualized as a programme with the ability to improve academic and behavioural outcomes in addition to other traditional mental health outcomes, but it would be beyond the scope of a mental health service to focus on academic needs that are in the purview of educators (e.g., to enhance reading skills). As described in the 'Implications' section below, the revised BRISC protocol will attend to educational outcomes, but remain focused on problem-solving surrounding social, emotional, and practical barriers to academic success.

Finally, respondents also discussed the ways to 'source' information about important outcomes. Integrated data systems that can identify students in need of services and allow for tracking multiple types of outcomes or functional domains (including mental health and educational outcomes) may facilitate problem-solving with students about the focus of treatment, monitoring progress over time, and communicating with school staff. To support these activities, new data systems may be created or existing data systems be re-purposed (Lyon, Nakamura, & Higa-McMillan, 2013).

#### Limitations

Although the current studies were formative by design, several limitations should be considered. First, our sample sizes were small and not fully representative of all types of school and mental health roles that could provide meaningful input about the development

of an SBMH intervention. The first study in particular only had 13 participants, and only one of them was an individual from the local school district (in contrast, the second study had considerably greater local representation). Nevertheless, approximately half of the participants in both studies routinely worked in the district. All participants were selected by the research team based on their national and local reputations, which is also not likely to yield fully generalizable opinions. Regarding our qualitative methodology, the research team identified a set of four common themes from the initial study and used these to solicit input from the larger nominal group process in Study 2. This may have limited the breadth and diversity of input we received. Finally, although the NGT provided a systematic method of prioritizing participant ideas (through voting), it could have biased our conclusions by giving greater weight to ideas suggested by persuasive group members and de-emphasizing ideas that did not fit the existing project narrative or contemporary views related to SBMH.

## Implications and next steps

Despite the above limitations, the information gleaned from these two studies has been instrumental to the design and iterative evaluation of BRISC and its implementation supports, and may help guide other SBMH development efforts focused on integration into the school context. As a result of this input, we have developed an implementation framework that is not only specific to BRISC but also draws from SWPBS and RtI assessment tools, such as the Self-Assessment and Program Review (Walker & Cheney, 2012). Specific revisions to the intervention protocol, based on lessons learned from the current studies, include the incorporation of explicit evaluation of academic functioning at the outset (using a brief academic and functional review tool), use of a 'Top Problems' (Weisz et al., 2012) approach to identify academic and social-emotional targets, and steps to assure that student 'voice' is central in developing goals and targets. The most recent version of the BRISC protocol also includes a focus on problem-solving directly related to homework completion and school attendance as a primary component. We are currently working on ways to allow for easy access to school data so that the work of the mental health providers can be accurately geared to support student's academic progress. Finally, to address the issue of a school's 'readiness' to move towards a more integrated mental health-academic supports approach, we have begun to meet with school personnel to identify criteria to be incorporated into a school readiness assessment tool.

A particularly important suggestion that emerged from both the studies was that BRISC's use of mental health and educational data for progress monitoring may be enhanced by support from a computerized measurement feedback system (MFS; Bickman, 2008) designed to track youth outcomes. These types of systems and related technologies have the potential to advance assessment and facilitate quality improvement in schools in a manner that is contextually appropriate (Lyon, Nakamura, & Higa-McMillan, 2013). Fortunately, a parallel but independent initiative to implement a MFS for use by SBMH providers is currently underway in the district in which BRISC is being developed (Lyon, Knaster Wasse, Ludwig, Pullmann, & McCauley, 2013).

In conclusion, as we attempt to develop a brief, effective school mental health intervention, our team is cognizant that 'effective programs rarely emerge without consideration of their implementation contexts' (Cappella, Reinke, & Hoagwood, 2011, p. 460). Principal among the contextual factors relevant to intervention effectiveness in schools is the systematic collection and appropriate use of educational data. In collaboration with school and mental health stakeholders, BRISC is being developed

with an explicit focus on these kinds of outcomes to enhance school-mental health integration and maximize intervention-setting fit.

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